Innovation for Our Energy Future



Join us the second Thursday of every month for a series of "brown bag" seminars, sponsored by the **National Renewable Energy Laboratory and** the U.S. Department of **Energy. Each seminar** is held at NREL's **Washington office with** a videoconference link to Golden, Colorado. Topics focus on new and innovative renewable energy and energy analysis strategies, models, and technologies.



Energy Analysis Seminar Series

A "brown bag" analytical seminar series

An EPA Overview: Energy Technology Assessment and Regional MARKAL Modeling Initiatives

Tim Johnson, Office of Research and Development (ORD) Environmental Protection Agency (EPA) Thursday, May 13, 2004

Noon –1 p.m. (in Washington, D.C.) 10–11 a.m. (videoconference in Golden, Colo.)

The Environmental Protection Agency's (EPA) Office of Research and Development (ORD) is pursuing an air quality assessment to examine the potential consequences of global change on tropospheric ozone and particulate matter in the year 2050. In developing this assessment, it was recognized



Tim Johnson

that the interaction between energy use and technological change is one of the most important drivers for the future of air quality. Within EPA, the Technology Assessment and Co-control Team (TACT) of the National Risk Management Research Laboratory is chartered with providing potential trajectories for technological evolution to ORD's Air Quality Assessment. Rather than defining a "best guess" future, TACT is pursuing a scenario-oriented approach to the assessment of future technologies and patterns of technology adoption, with a focus on the transportation and electricity-generation sectors of the U.S. economy. This presentation will discuss TACT's development of a national database for use with the MARKAL (market allocation) energy-economic model and its regional extensions.

Tim Johnson joined the EPA's Office of Research and Development in Research Triangle Park, North Carolina, as a physical scientist in 2003, after earning his Ph.D. from the Department of Engineering and Public Policy at Carnegie Mellon University. Johnson's primary research interests span subjects at the interface between science and society, as well as associated issues related to data analysis and modeling. His current work involves the development of regional energy-economic models to assess the effects of technological and social change on air emissions, with an extension of these models into an integrated spatial framework for characterization and evaluation of trends in local environmental quality.

Golden, Colo., information

1829 Denver West Drive, Golden, Colorado Building 27, Conference Room 230 A/B

Please contact Lynne Fenn at lynne_fenn@nrel.gov or 303-384-7439

Washington, D.C., information

901 D Street SW (also the Aerospace Building, 370 L'Enfant Promenade), adjacent to the Forrestal Building

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